

Pitch accent in Japanese

I. Pitch accent basics

- (1) **Pitch accent** (as realized in most dialects of Japanese):
A fall from high pitch (H) to low pitch (L) within a word or phrase
- (2) Pitch accent patterns vary across dialects of Japanese, especially with respect to:
 - (a) Is there a distinction between accented and unaccented words?
 - (b) What *positions* in a word can a pitch accent occupy, in principle?
 - (c) Where does the pitch accent (if any) occur in a *particular* word?
 - (d) Once we know where the pitch accent (if any) occurs in a word, is it possible to systematically predict whether the rest of the word will have H or L pitch?

II. Pitch accent in the Tokyo dialect

- (3) Examples (sound files on Canvas, in *Pages > Example sound files for pitch accent*)
 - (a) [muráski] 'purple'
 - abrupt pitch fall
 - L H L L tone shape
 - (b) [momoiro] 'peach (color)'
 - no abrupt pitch fall
 - L H H H shape
 - (c) [iró] 'color'
 - can't hear the pitch fall!
 - (c') [iró-wa] 'color-TOPIC'
 - if we heard this, we would hear the pitch fall
 - LH(+L) shape when [-wa] is added
- (4) More examples, with topic marker

L H H H	H L L L	L H L L	L H H L
[sa.kuu.ra (-wa)]	[ka.ra.suu (-wa)]	[ko.ko.ro (-wa)]	[o.to.ko (-wa)]
'cherry tree'	'crow'	'heart'	'man'
- (5) Details of accent patterns in the Tokyo dialect — answering the questions in (2)
 - (a) There is a distinction between accented / unaccented words — unpredictable
 - (b) (more about this question in a later discussion)
 - (c) Speakers need to learn location of accent for each word — unpredictable
 - Full disclosure: Accent location in *simple nouns* is fairly free in the Tokyo dialect, but *verbs* and *adjectives* are more restricted; compound nouns are also mostly predictable
 - (d) Other tones in the word:
 - All positions *after* the accented position are L
 - All positions *before* the accented position are H
 - The very first tone in a *phrase* is often lowered to L

- (6) How does the phonological grammar determine H/L tone patterns (Tokyo dialect)?
- (a) **Whether** a word is accented, and if so **where** the accent is located, are specified in lexical entries (the “mental dictionary”)
 - This is because *unpredictable* information must be *memorized* and *stored*
 - (b) H and L tones are **assigned** to positions in the word by the **phonological grammar**
 - This is because the pattern of H and L tones is *predictable* once we know where the accent is (if any)

(7) **Algorithm for tone assignment in the Tokyo dialect**

(Kawahara 2015: §1.4, slightly modified for clarity/better coverage)

- i. *Tones Assigned by Accent*: If there is an accent, assign H to the accented position and L to the following position, if any (Kawahara says “syllable” instead of “position”; we will revisit this question)
- ii. *Initial Rise*: Unless there is already a H tone assigned by accent to the initial position, assign L to the initial position and H to the following position
- iii. *Tone Spreading*: If any positions remain toneless after (i) and (ii), they copy (share) the rightmost preceding tone

For an advanced, more phonetically sophisticated view of pitch-accent assignment in Tokyo:
 Pierrehumbert, Janet, & Mary Beckman. 1988. *Japanese tone structure*. Cambridge, MA: MIT Press.

Venditti, Jennifer. 2005. The J_ToBI model of Japanese intonation. In Sun-Ah Jun (ed.), *Prosodic typology*, 172–200. Oxford: Oxford University Press.